Interactions Between Oil Palm (*E. guineensis* Jacq.) and Pollinator Insect *E.kamerunicus Faust* (*Coleoptera: Curculionidae*)

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ABSTRACT

The oil palm, *Elaeis guineensis* Jacq., is a tropical plant of economic interest and the world's leading source of vegetable oil. Fruit set rate and then production of well-formed fruits in a bunch depends mainly on pollen transported by *E. kamerunicus* introduced in Southeast Asia in the 1980's.

These insects are involved in a specialized mutualist relationship with their host plant. The male inflorescence in which the insects develop is highly attractive to *E. kamerunicus* and, through an olfactory deception phenomenon, they visit the female inflorescence on which they deposit pollen.

We present here a study carried out in Indonesia in 2016 with the aim of increasing our knowledge about the interactions between the oil palm and *E. kamerunicus*. We have measured the activity of the insects using image captures and temperature recorder positioned near female inflorescences at the anthesis stage. A total of ten female inflorescences of *E. guineensis* were surveyed.

The results showed the correlation between dynamic of insect visits during daytime, the anthesis phase and the heat emission of female inflorescences. These preliminary results would also call into question the phenomenon of deception.

Keywords: *Elaeidobius kamerunicus*, oil palm, anthesis, deception, interactions, pollination